

Ecological Site Description ID:		R231XY128AK	
Ecological Dynamics of the Site:			
<p>This boreal ecological site occurred on broad gentle slopes and was considered a plain (i.e. slope ranged from 1-9%). Soils were wet due to a thick organic mat, shallow permafrost, and low slope. Site conditions limited tree growth. For community phase 1.1, soils were classified as fibristels and were composed of organic material over loess and/or loamy cryoturbate. As slope increased, soils supported black spruce which was likely highly related to soil drainage. Charcoal was observed in soil profile so fire was a disturbance regime. However, sampled sites had not burned recently and documentation only occurred for climax phase. No alternate states were observed.</p>			
State and Transition Diagram:			
<div><div>1. Reference State</div><div><div>Boreal tussock peat frozen plains</div><div>R231XY128AK</div></div><div><div><div>1.1 (HCPC) Mixed ericaceous scrub-cloudberry-cotton grass tussock- <i>Sphagnum</i> moss scrubland</div><div>1.1 a</div><div>1.2 (2FE) Cotton grass tussock-mixed ericaceous scrub-<i>Sphagnum</i> moss herbaceous community</div><div>1.2 a</div></div></div></div>			
State ID Number:	1	State Name:	Reference
State Narrative:	<p>The soils are wet, have permafrost, and generally have a thick organic mat (i.e. >15 cm). Site condition favor low-severity burns. Under a low-severity burn scenario, some shrubs and graminoids can quickly recolonize and dominate a site using below ground root reserves that are not consumed in the fire event.</p> <p>Stunted and regenerative trees are defined as growing less than 15’ in height. Medium shrubs are defined to grow 3-10’ in height, low shrubs are defined to grow 8” – 3’ in height, and dwarf shrubs are defined to grow less than 8” in height.</p>		

Photo 1.1



Community Phase Number:

1.1

Community Phase Name:

Mixed ericaceous scrub-cloudberry-cotton grass tussock- *Sphagnum* moss scrubland

Community Phase Narrative:

The dominant vegetation was a mixture of tussock forming sedges, dwarf scrubs, and low scrubs. Stunted and regenerative *Picea mariana* were observed but tree cover was a minor vegetative component. The most common low shrubs were *Ledum palustre* and *Betula nana*. The most common dwarf shrubs were *Rubus chamaemorus* and *Vaccinium vitis-idaea*. Tussock forming sedges were a dominant component of vegetation and the most common species were *Eriophorum vaginatum* and *Carex bigelowii*. Forbs and lichens were minor vegetative components. *Sphagnum* moss was abundant and was estimated to cover >40% of sampled plots.

Community Pathways

Pathway Number

Pathway Name & Description

1.1 a

Fire.

Photo 1.2

No data.

Community Phase Number:

1.2

Community Phase Name:

Cotton grass tussock-mixed ericaceous scrub-*Sphagnum* moss herbaceous community

Community Phase Narrative:
No data. While phase 1.2 was undocumented, this phase was observed in the field. When compared to phase 1.1, scrub cover decreased and cotton grass cover increased.

Community Pathways	
Pathway Number	Pathway Name & Description
1.2 a	Normal time and growth without fire.